

Energy Policy Act of 2005, Section 1234 Economic Dispatch Study

Questions for Stakeholders

Section 1234 of the Energy Policy Act defines economic dispatch as “the operation of generation facilities to produce energy at the lowest cost to reliably serve customers, recognizing any operational limits of generation and transmission facilities.” With that definition in mind, please answer as many of the following questions as you wish, attaching supporting materials such as studies or testimony that was filed in state or federal regulatory proceedings to support your answer.

Please send your response by e-mail to Economic.Dispatch@hq.doe.gov **no later than September 21, 2005**. Be sure to include the name and phone number of an individual who can answer any questions that may arise about your comments. Thanks in advance for your assistance with this study.

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Questions

1. What are the procedures now used in your region for economic dispatch? Who is performing the dispatch (a utility, an ISO or RTO, or other) and over how large an area (geographic scope, MW load, MW generation resources, number of retail customers within the dispatch area)?

This question is best answered by the utilities in SERC.

2. Is the Act’s definition of economic dispatch (see above) appropriate? Over what geographic scale or area should economic dispatch be practiced? Besides cost and reliability, are there any other factors or considerations that should be considered in economic dispatch, and why?

Yes, the definition of economic dispatch is appropriate. Other factors besides cost and reliability that should be considered in economic dispatch are the financial condition of the non-utility generator and the fuel source. The ability of a generator to pay its bills may impact the reliability of that generator as a source of power. A very large percentage of non-utility generating units are natural gas-fired. It does not make sense to rely too heavily on any single fuel source. There are also still some technological issues with certain generating sources that may impact grid stability / reliability.

3. How do economic dispatch procedures differ for different classes of generation, including utility-owned versus non-utility generation? Do actual operational practices differ from the formal procedures required under tariff or federal or state

rules, or from the economic dispatch definition above? If there is a difference, please indicate what the difference is, how often this occurs, and its impacts upon non-utility generation and upon retail electricity users. If you have specific analyses or studies that document your position, please provide them.

South Carolina has no codes or regulations governing economic dispatch procedures. This question is best answered by the utilities in SERC.

4. What changes in economic dispatch procedures would lead to more non-utility generator dispatch? If you think that changes are needed to current economic dispatch procedures in your area to better enable economic dispatch participation by nonutility generators, please explain the changes you recommend.

This question presupposes that economic dispatch procedures SHOULD lead to more non-utility dispatch. Non-utility generators should only be dispatched when they: a) are the most economical; b) are of equivalent reliability as utility generators; and, c) do not deter from maintaining a diverse fuel mix in the generation portfolio. Jurisdictional utilities are subject to prudence reviews and must demonstrate that least-cost sources of supply have been utilized.

5. If economic dispatch causes greater dispatch and use of non-utility generation, what effects might this have – on the grid, on the mix of energy and capacity available to retail customers, to energy prices and costs, to environmental emissions, or other impacts? How would this affect retail customers in particular states or nationwide? If you have specific analyses to support your position, please provide them to us.

Qualitatively speaking, since most non-utility generation is natural gas-fired, greater dispatch of those units could have environmental benefits during peak periods, but detract from fuel diversity. If dispatch is done truly on an economic basis “to produce energy at the lowest cost to reliably serve customers”, these units would be dispatched only when they are the low-cost generation source. Some proven renewable energy sources, such as windpower, have technical interconnection issues which could negatively impact grid reliability, if not resolved.

6. Could there be any implications for grid reliability – positive or negative – from greater use of economic dispatch? If so, how should economic dispatch be modified or enhanced to protect reliability?

The question is really not about the greater use of economic dispatch...most utilities use some form of economic dispatch today...it is about including other than utility-owned generation in the array of generators to be dispatched. There could be positive implications from having more generating sources available to be dispatched. There could be negative implications if utilities rely too heavily on non-utility generators which are virtually all natural gas-fired, or

still have technical interconnection issues (wind-generated). Costs could actually increase as a result of using intermittent generation such as wind power because dependable back-up generation would be needed. In addition, the financial condition of some non-utility generators is not strong which could also impact availability and reliability. Contracts containing sufficient penalties for non-performance may be required for anything more than very short periods of time.